



Charles River

Stormwater limits help revive the river

U.S. EPA | STORMWATER OUTREACH AT EPA NEW ENGLAND



STORMWATER is a leading cause of poor water quality. Rain or melted snow runs down driveways, sidewalks and streets carrying oil, dirt and other pollutants into nearby waterways. Polluted runoff, which can cause erosion and flooding, runs into waterways and degrades plants, fish, shellfish and other wildlife. In water used for recreation, the runoff can lead to illness, and people who eat contaminated fish can also become sick. Untreated stormwater can also contaminate drinking water sources.

INTRO:

During the last 20 years, EPA has focused on cleaning and controlling pollution in the Charles River watershed, an important recreational waterway for Boston and surrounding communities. Significant progress has been made to restore the Charles so it is safe for swimming and fishing, primarily by removing overflows from an antiquated sewer system and by eliminating illegal connections between sewers and stormwater pipes. These investments have stemmed the flow of bacteria and other health threats to the river. A key remaining challenge for the watershed is reducing the excessive phosphorus coming into the river, much of it through stormwater.

FOCUSING ON PHOSPHORUS:

Excessive phosphorus triggers the growth of plants and algae throughout the Charles. This plant growth limits recreation in the river and can damage fish habitat, even killing fish in severe circumstances. Besides being an ugly nuisance, the blue-green algae blooms can turn toxic, raising health threats to humans and animals, including dogs.

Stormwater is a primary source of phosphorus pollution. Phosphorus also enters the river from wastewater treatment plants, combined sewer overflows and illicit sewage connections. While these sources have faced stricter controls in recent years, stormwater running off private properties remained uncontrolled.

Phosphorus in stormwater can be reduced by building rain gardens, artificial wetlands, tree boxes and other systems that filter the water and replenish groundwater; by replacing conventional pavement with porous pavement, and by using high efficiency street sweepers to pick up soil,

leaves and other debris that contains phosphorus.

In late 2008, after evaluating all of the sources of phosphorus to the Charles, EPA determined that the discharge of stormwater from certain industrial, commercial and high-density residential facilities on the Charles River in Milford, Franklin and Bellingham should be controlled by federal permits. The permits will require these facilities to reduce phosphorus in stormwater discharges by 65 percent. Similar permits will likely be required in other communities in the Charles River watershed in coming years.

These permits will complement other permits being written by EPA and the state Department of Environmental Protection, including municipal stormwater permits which require all 35 Charles River communities to reduce phosphorus discharges from their stormwater systems.



Treating stormwater running into the Charles River will be critical to reaching the goal of cleaning the river.

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